lish economic writers. Even Petty is passed over with a few appreciative sentences ending in the judgment that he was not the father of political economy, but the father of political arithmetic or statistics — a classification that does not commend itself. The second is the low estimate placed upon the creative work of Turgot. We are led to feel that he was a mere imitator, a sort of commentator on the text of Quesnay, and that he was responsible through his weakness for the downfall of physiocratism.

It would lengthen this review unduly to go through the book in detail, even if it were possible for the reviewer to judge correctly the estimates offered of all the writers, doctrines, and policies which are rehearsed by the author. All that has been attempted is a general survey of the work. This brevity is, however, the less to be regretted as this history of political economy is of such marked merit and broad scholarship that, no matter what its demerits or how we may individually differ from the views of the author, all economists will feel obliged to consult it. It falls among the indispensable handbooks in every economic library.

The work contains an excellent bibliography.

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The History of the Greenbacks. By WESLEY CLAIR MITCHELL. [The Decennial Publications of the University of Chicago.] Chicago: The University of Chicago Press, 1903. 8vo, pp. xvi + 577.

THE world's greatest experiment in fiat money was in the United States from 1862 to 1878. We have here an adequate and, for a long time probably, a final account of it during the most interesting period — the period covered by the Civil War. Although the narrative is continued well through 1865 and some of the tables into 1866, still the course of the experiment after the war may be considered as untouched by this work.

The volume is in three approximately equal portions: the narrative history, the economic discussions, and the statistical appendices containing the data on which most of the economic discussions are based. The two portions into which the text is divided are designated respectively Part I and Part II.

Part I is in five chapters. The first of these narrates the financial

measures of the government during the first few months of the war. Then a chapter is devoted to each of the three legal-tender acts. The fifth chapter is entitled appropriately, "How Further Issues of Greenbacks Were Avoided in 1864 and 1865." This history has been told many times before, but it is told here fully and concisely. The arguments advanced in Congress for and against the legal tenders, and the change in the character of the arguments from one act to the next, are presented very clearly. It is interesting to notice that the sound-money element in Congress was weaker after the first legal-tender act was passed and the new money had actually gone into circulation. Their predictions of disaster seemed to be falsified. The new money was quite generally welcomed by the business men of the country. The evils were slower in coming. The author finds the real reason for the resort to legal tenders in the aversion of Congress to impose additional taxation, but he admits that this aversion was not unnatural, though unfortunate.

The appendices are a body material of permanent value for many purposes. Appendix A gives the highest, average, and lowest gold price, both monthly and daily, of greenbacks from the suspension of specie payments until the end of 1865. Appendix B gives, along with other price data, the relative prices of 135 articles at quarterly intervals from January, 1860, to 1865 or 1866. These are derived from the *Aldrich Report.* The absolute prices, however, are not given as in the original, but the relative prices are given by means of index numbers. Dr. Mitchell follows Dr. Falkner in taking January, 1860, as the starting-point, but he makes no use whatever of Falkner's index numbers or deductions, except for an occasional comparison with his own results. Tables 1 and 2 as given in this appendix are without explanation; for this the reader must look in the text at pp. 243-45. Some other price tables in Appendix B are derived from Vol. XX of the *Tenth Census,* but in these the prices are annual only. Appendix C is devoted to wages. The data for this are again the *Aldrich Report* and the *Tenth Census.* And here also it is the relative wages that are given and by means of index numbers, although in each case the initial wage per day is given.

It is safe to say that for statistics of prices during a time of violent fluctuation in the standard of value there is nothing better in existence. The writer of this review has had about two hundred of the computations verified, and many more of the index numbers

compared with the originals by inspection, with the result of finding only a single error. On p. 519 the wages of brick-burners, at Trenton, are represented by the index number 154 for both 1865 and 1866. It should have been 185 for 1866. On the same page is found what seems to be another error. The second group of brick laborers at St. Louis are represented by index numbers for each year from 1860 to 1866, but in the *Tenth Census* no figures are found for their wages for the years 1860, 1865, and 1866. How Dr. Mitchell found the initial wage of $1.25, as well as the index numbers for the three years, is not apparent.

Part II, on the economic consequences, contains forty pages in chap. 3, which is properly narrative, since it is a review in chronological order of the fluctuations in the value of the greenbacks and of the events which may have caused them, such as the legal-tender acts and other measures of Congress, elections, rumors of foreign complications, the condition of the money markets, and military events. But even without this narrative portion, Part II comprises somewhat more than one-third of the volume. The interesting portion of it for economists, the portion which contains the author's conclusions drawn from his own carefully prepared statistics in the appendices, is in chaps. 4–9, which treat in succession of prices, wages, rent, interest, profits, production and consumption, and the cost of the war.

Some of our familiar economic principles are here supported by new statistical evidence. On such points, the value of this volume is well expressed by the author himself:

> The difficulties arise mainly in explaining the quantitative effects of given causes; one often feels that, for aught one knows, a certain event might have produced equally well half or double the actual effect. But, as in the case of most economic questions, the qualitative analysis is less uncertain; one can see why the known factors should have produced a certain sort of consequences, though one would be puzzled to say why these consequences were of the given magnitude. (P. 190.)

One such topic which is well worked out is the loss which creditors experienced through being paid in depreciated money. On p. 363 is a table showing the percentage of loss or gain to a creditor in the purchasing power of the principal of loans made and repaid at dates between January, 1860, and July, 1865. Another familiar principle which can here be studied quantitatively is that wholesale prices respond the most promptly to any disturbance; they followed

the price of gold very closely; retail prices responded much less promptly (p. 261). Wages rose more slowly still, but with some exceedingly interesting differences between various classes of workers: males *versus* females, high-paid *versus* low-paid labor, and so on (pp. 290 ff.). The wages of teachers rose very slowly (pp. 319, 320). In 1864, when average retail prices had risen 111 per cent. (p. 261), the average wages of men teachers had risen only 18 per cent. and the wages of women teachers 39 per cent. (p. 320). The author considers the standard of living as a determining factor from the fact that it was not the lowest grades of laborers whose wages rose most promptly; not, for example, those receiving less than \$1 a day, whom he considers to have been single men, but those receiving wages just above the lowest, from \$1 to \$1.49, whom he takes to have been married men receiving the minimum for the support of a family. Turning next to the farmers, Dr. Mitchell finds that farm products rose in price less than other articles, and that therefore farmers as a class probably lost more than they gained through the issue of the greenbacks. The decrease in the use of credit, the large profits of manufacturers, contractors, and merchants, the illusory feeling of prosperity, the extravagance of the newly enriched, and the real economic disadvantage of it all are clearly brought out.

The point of economic theory which the history of the greenbacks has been most closely connected with, namely the quantity theory of the value of money, is dismissed in a few paragraphs (pp. 207–9, 271). His reason is thus given:

> It is altogether impossible to determine whether there was a close correspondence between the course of prices and the volume of the currency, as was affirmed by some writers and denied by others, because, as has been shown at length, the quantity of money in use cannot be ascertained. (P. 271.)

It is to be regretted, however, that the author did not, in the manner he has treated some other subjects, at least make the attempt and give what results he could, even though the margin of the indeterminate would have to be left very wide. His conclusion is rather against the quantity theory, for he says that "the quantity of the greenbacks influenced their specie value rather by affecting the credit of the government than by altering the volume of the circulating medium" (p. 208). It is, of course, true that the credit of the government did affect the value of the greenbacks, but it may have been through a factor which Mr. Mitchell also passes by with only a

brief mention; that factor is speculation. It should be clear on a moment's reflection that the prospect of a speedy termination of the war would lead speculators to throw any gold they might have in their possession on the market for what it would bring, and to hoard the interest-bearing notes of the government and possibly, even for a short time, the non-interest-bearing, with a view to using them later after the expected fall of prices should be realized. *Vice versa,* anything that pointed to a prolongation of the war, like the Union reverses in the summer of 1864, would lead speculators to get "short" of government notes of all kinds and "long" in gold. Here we have a factor which must have acted powerfully on the quantity of the circulating medium, even when there was no material change in the quantity of government notes in existence. Had Dr. Mitchell kept his eye open for evidences of this kind of speculation, he might have found facts of great interest.

This volume is notably free from typographical errors. A careful reading has revealed only two or three. The care which must have been used in the compilation of the tables has already been mentioned. Equal care was used in the collection of other material for the text. The only error found is on p. 136, where the amount of pure gold in a gold dollar is given as 23.2 grains instead of 23.22. This doubtless arose from taking the weight as fixed by the very important act of Congress of 1834, rather than as fixed by the relatively unimportant act of 1837, although the latter still remains in existence with reference to the weights of gold coins. But this is a small matter, and one outside of the sphere of the work, strictly speaking.

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The Second Bank of the United States. [The Decennial Publications of the University of Chicago.] By RALPH C. H. CATTERALL. Chicago: The University of Chicago Press, 1903. 8vo, pp. xiv + 538.

AS AN important part of the history of the Jacksonian period, the Second Bank of the United States has frequently been discussed by American historians, but previous to the appearance of Mr. Catterall's volume the history of this interesting institution had never been completely presented in even an approximately satisfactory manner.